IN THE CLAIMS

Claims 1-92 (Cancelled)

93(Currently amended). A monoclonal antibody which specifically recognizes (i) ~~an interferon-gamma (IFN-) inducing protein, also known as~~ IGIF ~~and~~or IL-18, having the following physiochemical properties of (1) to (4), or (ii) a variant thereof which has ~~substantially~~ the ~~same~~ physicochemical properties of (1) to (3) [as the protein of (i)] and has an amino acid sequence of SEQ ID NO:2 in which one or more amino acids are replaced with different amino acids, one or more amino acids are added to the N- or C-terminus of SEQ ID NO:2, or one or more amino acids at the N- or C-terminus of SEQ ID NO:2 are deleted:

(1) Molecular weight

19,000±5,000 daltons on gel filtration and sodium dodecylsulfate polyacrylamide gel electrophoresis (SDS-PAGE);

(2) Isoelectric point (pI)

4.8±1.0 on chromatofocusing;

(3) Biological activity

Inducing the interferon-γ production by immunocompetent cells; and

(4) ~~Partial~~ aAmino acid sequence

~~Possessing~~comprising the amino acid sequence of SEQ ID NO:2, wherein Xaa is Met or Thr.

94(Previously amended). A monoclonal antibody according to claim 93, wherein the amino acid sequence of the IGIF or IL-18 is encoded by a cDNA which hybridizes with a probe having the coding sequence shown in SEQ ID NO:1 at 60°C in a solution of 5 x SSPE, 5 x Denhardt's solution, 0.5% (w/v) sodium dodecyl sulfate (SDS), and 100 µg/ml denatured salmon sperm DNA and after washing in 6xSSC.

95(Previously amended). A monoclonal antibody according to claim 93, wherein said IGIF or IL-18 is obtainable from a mammal.

96(Previously added). A monoclonal antibody according to claim 93, wherein the IGIF or IL-18 comprises the amino acid sequence shown as residues 26-43 and 79-103 of SEQ ID NO:2.

97(Previously added). A monoclonal antibody which specifically recognizes a polypeptide having the amino acid sequence shown in SEQ ID NO:2, wherein Xaa is Met or Thr.

98(Previously added). A monoclonal antibody according to any one of claims 93 to 97 which is an IgG or IgM class antibody.

99(Previously added). An antibody according to any one of claims 93 to 97 which is labeled with a radiolabel, an enzyme, or a fluorophore.

100(Previously added). An antibody according to any one of claims 93 to 97 which is capable of inhibiting the biological activity of IGIF or IL-18.

101(Previously added). A hybridoma which produces a monoclonal antibody according to any one of claims 93 to 97.

102(Previously added). A method for producing a monoclonal antibody which comprises culturing a hybridoma according to claim 101 *in vitro* or *in vivo* under conditions suitable to promote production of the antibody and recovering the antibody so produced.

103(Previously added). A method according to claim 102, further comprising the step of subjecting the antibody to one or more processes selected from the group consisting of salting out, dialysis, filtration, concentration, centrifugation, separatory sedimentation, gel filtration

chromatography, ion exchange chromatography, HPLC, affinity chromatography, gel electrophoresis, and isoelectric focusing.

104(Previously added). A method for determining the presence of IGIF or IL-18 in a sample, comprising the steps of:

contacting a sample suspected to contain IGIF or IL-18 with an antibody according to any one of claims 93 to 97 under conditions suitable to promote the specific binding of the antibody to IGIF or IL-18 to form an immune complex; and

detecting any such immune complex which is so formed.

105(Previously added). A method according to claim 104, wherein the antibody is immobilized on an insoluble matrix or substrate.

106(Previously added). A method according to claim 104, wherein the antibody is labeled with a radiolabel, an enzyme, or a fluoprophore.

107(Previously added). A method according to claim 104, further comprising the step of quantifying the amount of IGIF or IL-18 present in the sample.

108(Previously added). A method according to claim 104, wherein the IGIF or IL-18 has the amino acid sequence shown in SEQ ID NO:2, wherein Xaa is Met or Thr.

109(Previously added). A method for purifying IGIF or IL-18 from a sample containing other components, comprising the steps of:

contacting the sample with a monoclonal antibody according to any one of claims 93 to 97 under conditions suitable to promote the specific binding of the antibody to IGIF or IL-18 to form an immune complex; and

separating the immune complex from at least one of the other components in the sample.

110(Previously added). A method according to claim 109, further comprising the step of recovering the IGIF or IL-18 from the immune complex.

111(Previously added). A method according to claim 109, wherein the antibody is immobilized on an insoluble matrix.

112(Previously added). A method according to claim 109, wherein the contacting step is effected by applying the sample to a chromatography column comprising an insoluble matrix.

113(Previously added). A method according to claim 112, further comprising the step of recovering the IGIF of IL-18 from the chromatography column.

114(Previously added). A method according to claim 113, wherein the IGIF or IL-18 is recovered in nearly quantitative yield and with a purity of at least 95%.

115(Previously added). A method according to claim 109, wherein the IGIF or IL-18 has the amino acid sequence shown in SEQ ID NO:2, wherein Xaa is Met or Thr.

116(Previously added). A method of inhibiting the biological activity of IGIF or IL-18, comprising the step of contacting an antibody according to claim 100, with the IGIF or IL-18.

117(Previously added). A method according to claim 116, wherein the IGIF or IL-18 has the amino acid sequence shown in SEQ ID NO:2, wherein Xaa is Met or Thr.

118(Previously amended). A monoclonal antibody specific to interferon-gamma (IFN-γ) inducing protein, also known as IGIF and IL-18.

119(Previously added). A monoclonal antibody according to claim 95, wherein said mammal is mouse.

120(New). An antibody obtainable by using (i) IGIF or IL-18 having the following physiochemical properties of (1) to (4), or (ii) an antigenic fragment of said IGIF or IL-18:

No method step - using how?

(1) Molecular weight

19,000±5,000 daltons on gel filtration and sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE);

(2) Isoelectric point (pI)

4.8±1.0 on chromatofocusing;

m2

(3) Biological activity

Inducing interferon-γ production by immunocompetent cells; and

(4) Amino acid sequence

Comprising the amino acid sequence of SEQ ID NO:2, wherein Xaa is Met or Thr.